Periscope.

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ANATOMICAL.

On the Nerve Cells of Dogs Inoculated against Lyssa. By Dr Béla Nagy. (*Neurol. Centralblatt*, 1896, No. 2). The histological researches of Schaffer, Babes, Mihailesco and others have shown that the nerve-cells undergo certain pathological changes under the influence of the lyssa poison. N. himself has demonstrated that there is a certain relation between the degree of these changes and the duration of the effect of the poison.

The purpose of the present investigations was to study the condition of cells in immunized animals. These researches have shown that the cells of the central nervous system of dogs immunized against lyssa, are entirely intact, and that they remain absolutely immune against injections occurring after the immunisation. N. further claims that on the grounds of these findings, he has succeeded in establishing an anatomical basis to the Högyes-Pasteur immunisation treatment. ONUF.

PHYSIOLOGICAL.

On the Severance of the Cord of Dogs at High Levels. By Prof. Gad and Dr. Flatau. (*Neurol. Centrbl.*, 1896, No. 4). Bastian and others, from clinical experience, have stated that lesions of the upper dorsal and lower cervical regions of the cord cause disappearance of the kneejerk, a statement which was recently corroborated by the painstaking, clinical and pathologic anatomical researches of Bruns.

The purpose of Gad's and Flatau's researches was to study the relation of such lesions to the condition of the kneejerks, and of the reflexes generally by experiments upon dogs. In order to avoid opening the dura, the authors, instead of performing transverse section of the cord with a knife, secured severance of continuity by passing a thread around it, constricting it firmly by tying a knot and cutting the thread off after the desired effect was reached. In one case the cord was thus severed in the upper dorsal region (between the third and fourth dorsal segments); on a second dog, in the lowest cervical region (between the seventh and eighth cervical segments). A third dog was operated upon between the dorsal and lumbar regions.

In the two first-named animals (lesion in lower cervical or upper dorsal region) the plantar reflex could be produced as early as the next day after the operation. On the following days the abdominal and cremaster reflexes appeared. These simple reflexes remained all the time without showing any distinct deviations from normal conditions.

The patellar reflexes had been tested in both cases before the operation. After the operation the knee-jerk was on the whole diminished, sometimes hardly to be noticed, but never entirely absent. In the castral animal with lesion between the lumbar and dorsal portions the knee-jerk was, on the contrary, highly exaggerated.

In the dogs with the high lesion of the cord, G. and F. could further note the following reflexes:

1st. The scratching reflex. It could be easiest produced by rubbing that part of the skin of the thorax which corresponds to the mammillary line. The reflex consists in a rhythmic scratching "of the abdominal wall" with the toes of the hind legs. The reflex ceases when the sensory stimulus ceases, or if an induction current is applied at the same time.

2. Defensive movements (Abwehrbewegungen). They are produced by pricking the toes of the hind legs several times in succession with a pin. They are also stopped by application of an induction current.

3. The oval reflex remains perfectly preserved and can be stated directly after the operation.

4. Micturition took place spontaneously, which, however, did not prevent a certain retention of urine; or it could be started by pressure upon the fundus vesicæ. Defecation was always (the micturition sometimes) accompanied by extension movements of the posterior extremities in which the tail also took part.

5. The coitus reflex. Produced by tickling of the glans penis. It consisted in, "coitus movements" of the trunk and lower extremities and was more distinct in the male dog as in the more active partner in the act.

That the continuity of the cord had been entirely severed was indicated by the absolute loss of sensation and by the findings of the autopsy. ONUF.